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Memo

To: CCAG members
From: Center for Climate Strategies
CC: ADEQ
Re: Technical Work Group (TWG) Priority Options For Analysis
Date: December 12, 2005

In the tables to follow we have attached a current tally of priorities for analysis developed by all technical work groups (TWGs) as well as lists of individual priorities for each TWG. These are based on progress made since the last CCAG meeting. The "short list" of priority options for analysis has been assigned a new number for tracking purposes, and also a reference to the original numbers from the "long list" matrix of options on which they are based. Much prioritization and consolidation have been applied to the original long list matrix, and more may follow as the CCAG and TWGs develop and evaluate options. From here forward we expect that most of the focus of TWG and CCAG discussions will center on shaping and analysis of individual options.

We also have attached a sample policy description template that shows the type of information that we'll be developing for each option in order to finalize it as a recommendation. This includes background information to help readers understand the option more clearly and specific definitions of the policy and key design parameters, implementation methods and results of quantification. Each of these policy templates will be a living draft and work in progress by the TWGs until final approvals are made by the CCAG.

Current Tally of Priority Options For Analysis For All TWGs (43 Total)

TWG	# Current Priorities For Analysis
Energy Supply	12
RCI	11
Transportation and Land Use	5
Agriculture and Forestry	15
Cross Cutting Issues	TBD
Total	43

Energy Supply Technical Work Group

List of Priority Options For Analysis (12 Total)

#	Policy Name	# From Policy Matrix Long List
	Renewable and Low-Emitting Energy	
1R	Environmental Portfolio Standard	1.1
2R	Public Benefit Charge Funds	1.2
3R	Direct Renewable Energy Support: including Tax Credits and Incentives, R&D, and siting/zoning	1.3
	Emissions Policies	
1E	GHG Cap and Trade	5.1
2E	Generation Performance Standards	5.2
3E	Carbon Intensity Target	5.3
4E	Voluntary Utility CO2 Targets and/or Trading	5.6
5E	CO2 Tax	5.7
	Grid and Utility Policies	
1G	Reduce Barriers to Renewables and Clean DG	6.1, 6.2, 6.5
2G	Metering Strategies	6.3, 6.4
3G	Pricing Strategies	6.4, 6.12
4G	Integrated Resource Planning	6.11

Residential Commercial and Industrial Technical Work Group

List of Priority Options For Analysis (11 Total)

#	Policy Name	# From Long List Policy Matrix
	RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL	
RCI1	Demand-Side Efficiency Funds, Incentives, and Programs	1.1, 1.2, 1..3, 1.4, with 6.1, 6.2 as Supporting Policies
RCI2	State Leadership Programs	2.1 with 6.1, 6.2 as Supporting Policies
RCI3	Appliance Standards	3.1 with 6.1, 6.2 as Supporting Policies
RCI4	Building Standards/Codes	4.1 with 4.2, 6.1, 6.2 as Supporting Policies
RCI5	"Beyond Code" Building Design Incentives and Programs	5.1 with 4.2, 6.1, 6.2 as Supporting Policies
RCI6	Distributed Generation/Combined Heat and Power	8.1, 8.2, with 6.1, 6.2, 8.3, elements of 10.1 as Supporting Policies
RCI7	Distributed Generation/Renewable Energy Applications	9.1, with 6.1, 6.2, 8.3, elements of 10.1 as Supporting Policies
RCI8	Electricity Pricing Strategies	10.1, with 8.3 as Supporting Policy
RCI9	Mitigating High GWP Gas Emissions (HFC, PFC)	12.1, 12.2, 12.3
RCI10	Demand-Side Fuel Switching	13.1
RCI11	Industrial Sector GHG Emissions Trading or Commitments	14.1
	[Demand-Side Solid Waste/Wastewater Management Measures Are Still To Be Considered by TWG]	16.1 – 16.5

Transportation and Land Use Technical Work Group

List of Priority Options For Analysis (5 Total)

(Note: A subgroup of the TLU TWG has been formed to determine whether any of the alternative fuel options, currently rated at a medium priority, should be considered as high priority for analysis.)

#	Policy Name	# From Policy Matrix Long List
	PASSENGER VEHICLE GHG EMISSION RATES	
1	California GHG Emission Standards (this includes Phase II of these standards if adopted by California)	1.1.1
	LAND USE AND LOCATION EFFICIENCY	
2	Smart Growth Bundle of Options	2.1.1, 2.1.2, 2.1.3, 2.1.4
	INCREASING LOW-GHG TRAVEL OPTIONS	
3	Multimodal Transit Bundle of Options	3.1.1, 3.1.2, 3.1.3
	FREIGHT	
4	Promote Idle Reduction Technologies	4.2.6
5	Enforce Anti-Idling	4.2.7

Agriculture and Forestry Technical Work Group

List of Priority Options For Analysis (15 Total)

#	Policy Name	# From Long List Policy Matrix
	FORESTRY	
F1	Forestland Protection from Developed Uses	6.1
F2	Reforestation/Restoration of Forestland	6.5
F3a	Forest Ecosystem Management – Residential Lands	6.8, 6.13, 6.14, 6.15, 6.16, 6.17, 6.18, 6.19 and possibly 7.1, 7.2, 7.3, 7.4, 7.5, and 8.1, 8.2, 8.3, 8.6
F3b	Forest Ecosystem Management – Other Lands	6.8, 6.13, 6.14, 6.15, 6.16, 6.17, 6.18, 6.19 and possibly 7.1, 7.2, 7.3, 7.4, 7.5, and 8.1, 8.2, 8.3, 8.6
F4	Improved Commercialization of Biomass Gasification and Combined Cycle	8.5
	AGRICULTURE	
A1a	Manure Management – Manure Digesters	1.1, 2.2
A1b	Manure Management – Land Application	2.2
A2	Biomass Feedstocks for Electricity or Steam/Direct Heat	1.3
A3	Ethanol Production	1.4
A4	Change Feedstocks (optimize nitrogen for N_2O reduction) Change Feedstocks	2.3
A5	Reduce Non-Farm Fertilizer Use	2.4
A6	Grazing Management	3.5
A7	Convert Land to Grassland or Forest	4.1
A8	Agricultural Land Protection from Developed Uses	4.2
A9	Programs to Support Local Farming/Buy Local	5.2

Draft Policy Option: F1 Forestland Protection from Developed Uses

1. Policy Description:
    a. Lay description of proposed policy action: Reduce the rate at which existing forestlands and forest cover are cleared and converted to developed uses.
    b. Policy Design Parameters:
        i. Implementation level(s) beyond BAU: Acres of forestland saved from expected rates of land clearing.
        ii. Timing of implementation: Acres of forestland saved from land clearing from 2006-2020, including acres saved per year in 2010 and 2020, including any necessary ramp up period.
        iii. Implementing parties: Types of land ownerships and authorities.
        iv. Other: Carbon densities of live carbon stocks for acreages saved, and rates of recovery of cleared woody biomass to energy recapture and or durable wood products.
    c. Implementation Mechanism(s): Indicate which mechanisms are to be used, and describe the specific approach that is proposed
        i. Information and education
        ii. Technical assistance
        iii. Funding mechanisms and or incentives
        iv. Voluntary and or negotiated agreements
        v. Codes and standards
        vi. Market based mechanisms
        vii. Pilots and demos
        viii. Research and development
        ix. Reporting
        x. Registry
        xi. Other?

2. BAU Policies/Programs, if applicable:
    a. Description of policy/program #1
    b. Description of policy/program #2
    c. Etc.

3. Types(s) of GHG Benefit(s):
    a. CO2: Carbon savings occur as a result of protection of live carbon stocks from conversion to harvested biomass, and subsequent decay or combustion from open burning or energy recapture. These carbon losses from harvested biomass are offset to some extent for a portion of harvested and cleared biomass that is converted to durable wood products, and for a portion converted to renewable energy that displaces fossil energy use. Because conversion of forestland to developed land uses typically is permanent, replacement biomass does not grow back on the site to offset removals of live tree stocks.
    b. CH4: Not applicable
    c. N2O: Not applicable
    d. HFC's, SFC's: Not applicable
    e. Black Carbon: Emissions of black carbon result from combustion of woody biomass from open burning of land clearing.

4. Types of Ancillary Benefits and or Costs, if applicable:
    a. Protection of working lands for sustainable wood products use, recreation, cultural and natural heritage.
    b. Environmental asset protection, including watersheds, wildlife and air quality.
    c. Reduced costs of infrastructure and services for dispersed or low density development.
    d. Reduced transportation emissions from increased location efficiency.

5. Estimated GHG Savings and Costs Per MMTCO$_2$e:
    a. Summary Table of:
        i. GHG potential in 2010, 2020
        ii. Net Cost per MMTCO$_2$e in 2010, 2020
    b. Insert Excel Worksheet showing summary GHG reduction potential and net cost

6. Data Sources, Methods and Assumptions:
    a. Data Sources
    b. Quantification Methods
    c. Key Assumptions

7. Key Uncertainties if applicable:
    a. Benefits
    b. Costs

8. Description of Ancillary Benefits and Costs, if applicable:
    a. Description of issue #1
    b. Description issue #2
    c. Etc.

9. Description of Feasibility Issues, if applicable:
    a. Description of issue #1
    b. Description of issue #2
    c. Etc.

10. Status of Group Approval:
    a. Pending
    b. Completed

11. Level of Group Support:
    a. Unanimous Consent
    b. Supermajority
    c. Majority
    d. Minority

12. Barriers to consensus, if applicable (less than unanimous consent):
    a. Description of barrier #1
    b. Description of barrier #2
    c. Etc.